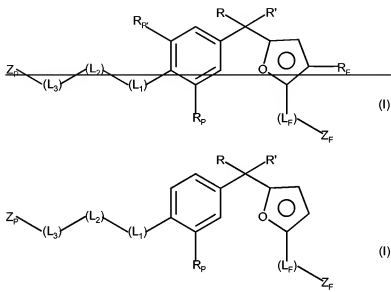


AMENDMENTS TO THE CLAIMS

1. (currently amended) A compound represented by formula I or a pharmaceutically acceptable salt derivative thereof:



wherein;

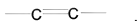
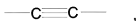
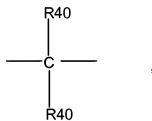
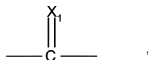
R and R' are independently C₁-C₄ alkyl, C₁-C₄ fluoroalkyl, or together R and R' form a substituted or unsubstituted, saturated or unsaturated carbocyclic ring having from 3 to 8 carbon atoms;

~~R_P, R_F, and R_P are~~ independently selected from the group consisting of hydrogen, halo, C₁-C₄ alkyl, C₂-C₄ alkenyl, C₂-C₄ alkynyl, C₁-C₄ fluoroalkyl, -O-C₁-C₄ alkyl, -S-C₁-C₄ alkyl, -O-C₁-C₄ fluoroalkyl, -CN, -NO₂, acetyl, -S-C₁-C₄ fluoroalkyl, C₂-C₄ alkenyl, C₃-C₄ cycloalkyl, and C₃-C₄ cycloalkenyl;

(L₁), (L₂), (L₃), and (L_F) are divalent linking groups independently selected from the group consisting of

a bond,

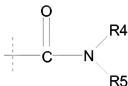
oxygen



where each R₄₀ is independently hydrogen, C₁-C₅ alkyl or C₁-C₅ fluoroalkyl;

where X₁ is O, CH₂ or [H, OH];

Z_F is



where R₄ and R₅ are independent hydrogen, C₁-C₄ alkyl, -O-C₁-C₄ alkyl, C₂-C₄ alkenyl,

C₂-C₄ alkynyl, C₁-C₄ haloalkyl, -NH(C₁-C₄ alkyl), or cyclopropyl, with the proviso that

only one of R₄ or R₅ may be hydrogen;

Z_P is

methyl,

ethyl,

n-propyl,

1-methylethyl,

1-methylpropyl,

2-methylpropyl,

1,1-dimethylethyl,

1,1-dimethylpropyl,
1,2-dimethylpropyl,
2,2-dimethylpropyl,
1-hydroxy-2,2-dimethylpropyl,
1-hydroxy-1,2,2-trimethylpropyl,
2-hydroxy-2-methylbutoxy
2-hydroxy-2-ethylbutoxy
2-hydroxy-2-ethyl-3-methylbutoxy
2-hydroxy-2-methyl-3-methylbutoxy
2-hydroxy-1,3,3-trimethylbutoxy
2-hydroxy-1-ethyl-3,3-dimethylbutoxy
2-hydroxy-1,2-diethylbutoxy
2-hydroxy-2-ethyl-1-methylbutoxy
3-methyl-3-hydroxypentyl,
3-methyl-3-hydroxypentenyl,
3-methyl-3-hydroxypentynyl,
3-ethyl-3-hydroxypentyl,
3-ethyl-3-hydroxypentenyl,
3-ethyl-3-hydroxypentynyl,
3-ethyl-3-hydroxy-4-methylpentyl,
3-ethyl-3-hydroxy-4-methylpentenyl,
3-ethyl-3-hydroxy-4-methylpentynyl,
3-propyl-3-hydroxypentyl,
3-propyl-3-hydroxypentenyl,
3-propyl-3-hydroxypentynyl,
1-hydroxy-2-methyl-1-(methylethyl)propyl
1-hydroxycyclopentenyl,
1-hydroxycyclohexenyl,
1-hydroxycycloheptenyl,
1-hydroxycyclooctenyl,
1-hydroxycyclopropyl,
1-hydroxycyclobutyl,
1-hydroxycyclopentyl,
1-hydroxycyclohexyl,

1-hydroxycycloheptyl, or
1-hydroxycyclooctyl.

2. (Previously Presented) The compound of claim 1 wherein

Z_P is 1,1-dimethylethyl, 1,2-dimethylpropyl, 2,2-dimethylpropyl, 1-hydroxy-2,2-dimethylpropyl, or 1-hydroxy-1,2,2-trimethylpropyl, provided that (L₁), (L₂), (L₃) are all bonds;

Z_F is selected from:

-C(O)NHMe,
-C(O)NHEt,
-C(O)NHOMe,
-C(O)NHOEt,
-C(O)NH(iPr),
-C(O)NH(tBu),
-C(O)NH(CF₃),
-C(O)N(Me)₂,
-C(O)NMeEt,
-C(O)NMe(iPr),
-C(O)NMe(tBu),
-C(O)NMe(CF₃),
-C(O)N(Me)F,
-C(O)N(Et)F
-C(O)N(iPr)F,
-C(O)N(tBu)F,
-C(O)N(Et)₂, or
-C(O)NEt(iPr);

or a pharmaceutically acceptable salt thereof.

3. (Previously Presented) The compound of claim 2 wherein

Z_F is selected from:

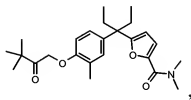
-C(O)NHMe,
-C(O)NHEt,
-C(O)NH(iPr),

-C(O)NH(tBu) ,
 -C(O)N(Me)_2 ,
 -C(O)NMeEt ,
 -C(O)NMe(iPr) ,
 -C(O)NMe(tBu) ,
 -C(O)N(Et)_2 , or
 -C(O)NEt(iPr) ;

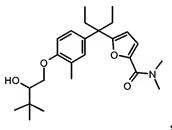
or a pharmaceutically acceptable salt thereof.

4. (Previously Presented) A compound according to claim 1, or a pharmaceutically acceptable salt or ester prodrug derivative thereof, represented by formulae A to J as follows:

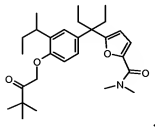
A)



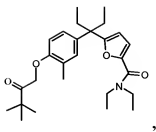
B)



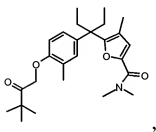
C)



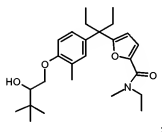
E)



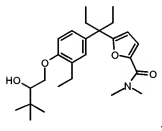
F)



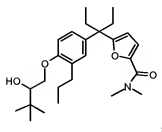
G)



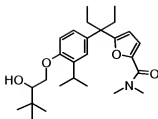
H)



I)

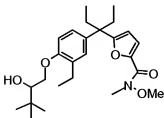


J)



, and

K)



.

5. (previously presented) The salt derivative of the compound according to claim 1 wherein the salt is sodium or potassium.

6. (previously presented) A pharmaceutical formulation comprising the compound of claim 1 together with a pharmaceutically acceptable carrier or diluent.

7. (withdrawn) A formulation according to claim 6 for treating osteoporosis comprising:

Ingredient (A1): a vitamin D receptor modulator of claim 1;

Ingredient (B1):

one or more co-agents selected from the group consisting of:

- a. estrogens,
- b. androgens,
- c. calcium supplements,
- d. vitamin D metabolites,
- e. thiazide diuretics,
- f. calcitonin,
- g. bisphosphonates,
- h. SERMS, and
- i. fluorides; and

Ingredient (C1): a carrier or diluent.

8. (withdrawn) The formulation of claim 7 wherein the weight ratio of (A1) to (B1) is from 10:1 to 1:1000.

9. (withdrawn) A formulation according to claim 6 for treating psoriasis comprising:

Ingredient (A2): a vitamin D receptor modulator according to claim 1;

Ingredient (B2):

one or more co-agents that are conventional for treatment psoriasis selected from the group consisting of:

- a. topical glucocorticoids ,
- b. salicylic acid,
- c. crude coal tar; and

Ingredient (C2): a carrier or diluent.

10. (withdrawn) The formulation of claim 9 wherein the weight ratio of (A2) to (B2) is from 1:10 to 1:100000.

11. (withdrawn) A method of treating a mammal to prevent or alleviate the pathological effects of Acne, Actinic keratosis, Alopecia , Alzheimer's disease, Bone maintenance in zero gravity, Bone fracture healing, Breast cancer, Chemoprevention of Cancer, Crohn's disease, Colon cancer, Type I diabetes, Host-graft rejection, Hypercalcemia , Type II diabetes, Leukemia, Multiple sclerosis, Myelodysplastic syndrome, Insufficient sebum secretion, Osteomalacia, Osteoporosis, Insufficient dermal firmness, Insufficient dermal hydration, Psoriatic arthritis, Prostate cancer, Psoriasis, Renal osteodystrophy, Rheumatoid arthritis, Scleroderma, Skin cancer, Systemic lupus erythematosus, Skin cell damage from Mustard vesicants, Ulcerative colitis, Vitiligo, or Wrinkles; wherein the method comprises administering a pharmaceutically effective amount of at least one compound of claim 1.

12. (withdrawn) The method of claim 11 for the treatment of psoriasis.

13. (withdrawn) The method of claim 11 for the treatment of osteoporosis.

14. (withdrawn) The method of claim 11 for treating a mammal to prevent or

alleviate skin cell damage from Mustard vesicants.

15. (withdrawn) The method of treating a mammal to prevent or alleviate the pathological effects of Benign prostatic hyperplasia or bladder cancer wherein the method comprises administering a pharmaceutically effective amount of at least one compound according to claim 1.

16. (withdrawn) The method of treating or preventing disease states mediated by the Vitamin D receptor, wherein a mammal in need thereof is administered a pharmaceutically effective amount of a compound of Claim 1.

17-22. (Canceled)